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Managing trade-offs in 'ecotopia': becoming green at the Centre for Alternative Technology

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The individual has been cast as both the source of and solution to many contemporary environmental problems. Although some individuals may display concern for the environment, actions are undertaken within a societal context that is often ambivalent to environmental issues. To 'become green', therefore, individuals have to negotiate a range of trade-offs between their environmental aspirations and the realities of life in a developed, consumer-based society. This paper draws on extensive field work at one site at which individuals have explicitly sought to manage these trade-offs – the Centre for Alternative Technology, Wales, UK. It argues that two distinct strategies are adopted to manage the tensions involved in becoming green: a 'strategy of segregation' – where professional practices are separated from personal actions to establish balance, if not consistency, in everyday life; and a 'strategy of alignment' – where (unsuccessful) attempts are made to unify personal and professional practices in line with environmental ideals. This paper outlines how the inability of these strategies to fully reconcile the tensions involved in becoming green has led to a 'politics of pragmatism' within environmental practice. It argues that this politics offers a way forward for contemporary environmentalism, both within 'ecotopian' spaces such as the Centre for Alternative Technology, but also in more mainstream spaces where the majority live their lives.

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Introduction: living in tension

> People are scared. You lead your life but then you suddenly realise that the way you live your life is [environmentally] wrong or bad. As soon as you realise this you are going to have to live with tension every day. As soon as you make that connection you start to realise all sort of stuff that you are going to have to live with, or change your life. (AB, respondent interview[1])

Ecological problems and environmental crises have become a regular occurrence in the 21st century. From oil spills and radiation leaks to biodiversity loss and global warming; concern over the deterioration of the biosphere and the balance of its constituent parts has become definitive of late-modern society. The challenge of moving human society in the global north and south (Corbridge 1986) towards a sustainable form of development is now broadly acknowledged. It has become a key challenge not only for policy makers, but also a range of public and corporate stakeholders at a variety of scales (Jacob 1994; Seghezzo 2009; World Commission on Environment and Development 1987). In policy and academic circles debates have centred on whose responsibility it is to realise a sustainable future; as Blake has identified,

> Tensions [have] emerge[d] over the relative responsibilities of different actors (individuals, communities, business, government, environmental groups) and over the most effective means to … translat[e] environmental concern into pro-environmental behaviour. (1999, 257)

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In the second decade of the 21st century, debates continue over the roles and responsibilities of each set of actors when tackling environmental problems. However, the *individual citizen* is increasingly seen as a growing contributor to the environmental crisis, and any sustainable future (Burkitt and Ashton 1996; Eden 1993; James and Scerri 2006; Scerri 2009). Connections have been made between individual decisions to drive and fly, burn fossil fuels at varying rates, invest in certain developments or consume particular commodities, and the negative consequences these decisions have for the state of the environment. As Spaargaren and Mol put it:

> The individual is no longer seen as 'the small polluter' whose contribution can be dismissed in the light of the huge impacts of big industrial polluters. … the relative contribution of [individuals has now] come to the fore as the main obstacle for realising ambitious environmental goals. (2008, 354)

In this situation the individual has been (re)cast as central to bringing into existence a sustainable future. However, as both citizens and consumers, the goal of 'becoming green' often places the individual in conflict: how can individuals lead 'green' lives in a society that often appears ambivalent to environmental issues? Despite environmental regulations gaining much ground in the developed world, cultures of capitalism and consumption often deter or drown out calls for greener individual practice (see Anderson 2010b; Bedford *et al.* 2004; Shellenberger and Nordhaus 2005). As a consequence individuals are placed in tension: how can they (and how can we) reconcile the 'greening' of lifestyles on one hand, and the ideologies of consumption on the other? As the opening quotation of this paper suggests, in this situation individuals have to find a way of living with the knowledge of their negative environmental effects, or try to change their life in difficult circumstances. What strategies are adopted to manage this trade-off?

This paper explores this process of negotiation by investigating how individuals manage the tensions involved in becoming green. By drawing on extensive field research at one site at which individuals have explicitly sought to manage these trade-offs (see below), the paper will outline two distinct strategies that are adopted to cope with this process. Firstly, a 'strategy of segregation' is adopted – where professional practices are separated from personal actions to establish balance, if not consistency, in everyday life. Alternatively, 'strategies of alignment' are adopted – where (unsuccessful) attempts are made to unify personal and professional practices in line with environmental ideals. The paper will illustrate how both these strategies often produce a sense of guilt within the individual over their inability to reconcile the trade-offs involved in 'becoming green'. This guilt is seen as negative and unhelpful, and contributes to the broader 'death of environmentalism' acknowledged by many writers within the ecological movement (e.g. Luke 2005; Nordaus and Shellenberger 2007; Shellenberger and Nordhaus 2005). Through calls to accept the inevitability of consumption and the need for eco-modernisation (see for example Porritt 2005), many recognise the need to translate the idealism of the green movement into a pragmatic politics that acknowledges the limits to 'becoming green' in contemporary society (see Anderson 2010b). This paper concludes by illustrating how research respondents adopt their own 'politics of pragmatism' to deal with these limits, and seek to turn the compromises involved into virtues. Their approach may offer a practical 'green'-print for environmentalism which, alongside greater government action, could offer a route to a more sustainable future for society as a whole.

Individual action: citizens, consumers and individualisation

As outlined above, the individual has been (re)cast as central to bringing into existence a sustainable future. Individual action to become green is possible in a range of ways; as both citizens and consumers individuals may undertake a variety of practices to green their lifestyle. As 'citizens', individuals can react positively to pro-environment regulations and behavioural-change campaigns (in the UK, for example, the government has sought to encourage individual action through 'Going for Green' (1995) and 'Are you doing your bit?' programmes (see Collins *et al.* 2003)). Individuals can also take up the opportunity offered by the provision of 'green infrastructure' (Horton 2003) including the use of kerbside or 'bring site' recycling, adopting public transport, or responding to waste minimisation campaigns (see Bulkeley and Gregson 2009). As 'citizens', individuals are also proactive in lobbying the government to green its regulatory agenda. This is often undertaken through avenues of participation provided by the state (e.g. through

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public inquiries, consultation procedures or voting practices) but also achieved beyond these avenues, through participation in rallies, demonstrations and other forms of direct action in order to change the political agenda from the 'outside' (see Maloney *et al.* 1994; and for examples, Anderson 2004; Chatterton 2006; Routledge 2009). Further 'citizen' action on behalf of the environment is done discretely and privately, as a personal response to individual values or environmental aspiration. Such action, including downsizing (Soper 2007), voluntary simplicity (Cherrier and Murray 2002) and the creation of autonomous zones (see Bey 2003, which includes the establishment of eco-villages or environmental centres), may indirectly function as 'good examples' to others (after Roszak 1989, 436), but are often a highly personalised response to bring the lifestyle of an individual into line with values and aspirations.[2]

Individuals therefore may react positively as 'citizens' to environmental crises – acting responsibly as a member of the democratic, social and ecological collective – but an increasingly common form of action involves individuals acting as part of the market system – as 'consumers' (see Barnett *et al.* 2005; Shaw *et al.* 2006; Stolle *et al.* 2005). In this vein, individuals opt to purchase commodities that are relatively benign in their environmental impact, or boycott particular products that fail to respond to environmental standards.[3] When compared with pure 'citizen' action, these practices may be conceptualised as self-interested in nature (following Smith 1845), however as many scholars argue, such is the variety and 'entangled' nature of practices (see Sharp *et al.* 2000), individuals can plausibly be framed as 'citizen-consumers' (see Arnould 2007; Scammell 2000; Schudson 2007; Slocumo 2004). As such individuals are

> able to satiate personal desires while simultaneously addressing social and ecological injustices. This hybrid concept … implies a social practice that can satisfy competing ideologies of consumerism (an ideal rooted in individual self-interest) and citizenship (an ideal rooted in collective responsibility to a social and ecological commons). (Johnston 2008, 232)

However, despite the varied avenues of action open to the individual, there remain a number of problems that face the citizen-consumer when considering environmental action. It has often been assumed that a lack of knowledge amongst the public about environmental problems has served as a crucial barrier to action (see Blake 1999). This 'information deficit' model assumes that once individuals know the effects of their 'business-as-usual' actions, behaviour will be switched to alternatives that are more environmentally benign. However, as recent scholarly work has acknowledged, the relationships between individual actions, values and motivations are complex (see Barr 2006; Barr *et al.* 2001; Shove 2003; Warde 2005). Although awareness *may* motivate practice, material infrastructures and cultural contexts are equally important in enabling, supporting and normalising behaviour. As Bulkeley and Gregson put it, there is more than

> information and hard cash at stake here, one of the most striking things to emerge … is the importance of the social, physical, and material [contexts for individual action] …. Physical contexts, such as access to recycling infrastructures and room for the storage and separation of recyclates, as well as social contexts, including shared norms, available time, service provision, and local waste knowledges, are critical in shaping … behaviour. (2009, 935)

It has become clear that the material availability and convenience of recycling boxes, food waste caddies, showers or even fridges influence the actions of individuals in their everyday life (see Hand and Shove 2007; Shove and Southerton 2000). Yet it is also increasingly acknowledged that the broader cultural context in which individuals operate influences the likelihood of pro-environmental behaviour. The uneasy relationship between environmentalist ideals and mainstream consumerist values often makes individual action problematic. As Johnston outlines, mainstream society is premised on 'a way of life dedicated to the possession and use of consumer goods, [and is] rooted in the capitalist necessity of selling an ever-expanding roster of commodities in a globalized economy' (2008, 241). Thus, despite attempts to foster 'green' consumption, economic expansion based on the consumption of material commodities remains ideologically opposed to the goals of environmental sustainability (see Blühdorn and Welsh 2007). The 'ideological contradictions' involved in the 'citizen-consumer' template (after Johnston 2008) are therefore writ large in relation to environmental issues. Recasting the individual as the solution to the environmental problem therefore places us as citizens and consumers in a contradictory situation. How can we reconcile the 'greening' of lifestyles on one

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hand, and the ideologies of consumption on the other?

In practice, managing the trade-offs associated with 'becoming green' in an unsustainable society involves the individual assuming a responsibility to act – even when this responsibility 'may demand significant and uncomfortable changes' in lifestyles and practices (Cloke 2002, 597). Ulrich Beck has termed this intentional negotiation of lifestyle and practice as the process of 'individualisation' (2001; Beck and Beck-Gernsheim 2002). In his words,

> 'Individualization' means, first, the dis-embedding and, second, the re-embedding of industrial society's ways of life by new ones, in which the individuals must produce, stage and cobble together their biographies themselves. (Beck 1994, 13)

Negotiating personal lifestyles and practices in this way not only becomes a 'deliberate effort that never ends' (Goldstein and Raynor 1994, 370), it also involves reflexive decisions to determine 'what properly belongs to the self and what does not' (Berman, in Goldstein and Raynor 1994, 370). In this way, individuals stage and cobble together their lives through their everyday practices, attempting to find liveable compromises between the realities of the society they are situated within, and the personalised nature of their hopes and dreams. This paper explores this practice of individualisation by investigating how green dreams are cobbled together within the confines of a developed, consumer-based society.

Researching tension

In order to explore the trade-offs involved in becoming green this paper draws on research at one site at which individuals have explicitly engaged with the tensions involved in environmental decision-making: the Centre for Alternative Technology, Machynlleth, UK. Established in 1973 by Gerard Morgan-Grenville, the Centre for Alternative Technology (CAT) is sited in a disused slate mine in the picturesque Dyfi Valley, mid-Wales. The Centre formed as a political critique of the industrial society of the 1970s. Inspired by the improvised hippy communes of the United States, CAT sought to translate the politics of the growing environmental movement into a sustainable residential community. Contemporary publications such as The Club of Rome's *Limits to growth* (Meadows *et al.* 1972) and The Ecologist's *Blueprint for survival* (Goldsmith 1972) warned of the unsustainable outcomes of the industrial-military complex that championed atomic power, hard energy and environmental exploitation. Alternatives were configured around the vague notion of a 'non-industrial society', as CAT's publication *Crazy idealists?* states, 'The [answer] seemed to be a *non-industrial* society, whatever that might mean' (1995, 6). With a 'hearty distrust of faceless, mass society and its mega-technologies' (1995, 4) CAT sought to experiment with substitutes under the rubric of 'alternative technology'.[4] Over the decades CAT developed into the self-styled 'leading eco-centre' in Europe (CAT 2007b, np), 'dedicated to eco-friendly principles' and functioning as a '''test bed'' for new ideas and technologies' (CAT 2007a, np). Today CAT functions as an education and residential community, with over 100 employees and volunteers. The Centre experiments with a range of alternative technologies, including photovoltaics, solar thermal, biomass combined heat and power, air source heat pumps, reed bed systems, and wind turbines. The site offers educational courses, is open to the public and houses a well-established on-site community for up to 16 residents. The paper draws on 3 months of participant observation within CAT's resident community and work organisation, with the author undertaking 30 in-depth interviews with a range of volunteers, employees and long-term residents of the Centre (see below).

The choice of CAT as a site at which to explore the trade-offs involved in 'becoming green' is underpinned by the centre's similarities to, but also key differences from, the more everyday spaces of mainstream society. In contrast to mainstream society, CAT is in many senses an 'ecotopia' (see Callenbach 1978; De Geus 1999; Pepper 2005 2007), with those employed benefitting from a range of green architectures and cause communities that enable pro-environmental behaviour (for an in-depth analysis of these elements, see Anderson 2010a). In terms of practical infrastructure, for example, residents benefit from the provision of low-cost housing serviced by renewable heating and power; as the following respondent outlines:

> It is much easier if you live here. When I think about the first year and I was living in town there are several things that you don't have control over. Like if you are renting a place you don't have control over how the house is heated or how you source your energy. Living here is much easier because in winter the electricity

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> comes from wind turbines and hot water comes from solar panels and so we are a bit spoilt in that I haven't had to set that up in anyway. (JT)

Coupled with housing and energy provision, CAT also provides a car pooling scheme for local and regional transportation. Several cars are available for short-term use by residents and employees, negating the need for individual car purchase and use. Along with the availability of ecological infrastructure, the presence of like-minded others within the resident and work community also provides encouragement to introduce and maintain more environmentally benign lifestyles. As the following respondents state:

> It was much easier [here], much easier really to take that radical step, because if I was living … in the middle of London it would not be as easy to do this kind of thing I don't think. Yes it is relatively painless and I think that CAT is more a community really, supportive and healing and forgiving. (LW)

> I suppose I probably didn't think about it as much. I would recycle and do some environmental things and not think about it that much before I came here. It definitely helps having a cause community. (RE)

Thus the provision of green infrastructure and the fostering of a cause community have enabled the creation of an 'ecotopian' culture at CAT. One may assume, therefore, that such provision removes the tensions involved in 'becoming green' for its residents and employees. This is not altogether the case. As I have argued elsewhere, although individuals at CAT are encouraged to adopt an alternative culture, individuals do not live totally isolated or insulated from the pressures, appetites and attractions of mainstream society (Anderson 2007 2010a). Although CAT might seem a philosophical and geographical escape from mainstream society,[5] it is not a purely independent or autonomous space. Rather, CAT can be better understood as an 'encounter space' where, in this case, environmental and consumerist values meet (Percy-Smith and Matthews 2001, 53). As such, and like all other spaces in the developed world, CAT is a site that is thoroughly connected, and often interpenetrated by notions of consumption and capitalism. CAT is therefore a centre that may be more acutely sensitised to contemporary environmental problems and their solutions, but it is also a site where individuals remain troubled by the tensions and trade-offs involved in becoming green. As a site of study, therefore, CAT offers the potential to illuminate both the tensions existing in broader society, as well as their possible solutions.

In order to explore these tensions and the manner in which they are negotiated by individuals at CAT, this research adopted a 'life-narrative' approach (Callero 2003; Maines 2001). As Somers (1994) suggests, social life is often 'storied', it is made meaningful to individuals and others through translation into a 'life narrative'. In this way individuals can come to know, understand and make sense of the social world and their social identities. In this tradition, individuals were asked, through open-ended interviews, to discuss in their own words their route to CAT, their interest in green activity, and how these events relate to their broader lifestyle choices. Through these 'life stories' it was hoped that the contradictions and coherences that individuals encounter in their environmental decisionmaking would be revealed through a discussion of everyday practice. Although this approach was mindful of the tendency for individuals to script a life-narrative that emphasises consistency over contradiction, it was more sensitive to the risks involved in exposing (un)intentionally hidden contradictions through interview. As Taylor has recognised,

> a person or group can suffer real damage, real distortion, if the people or society around them mirror back to them a confining or demeaning or contemptible picture of themselves. (cited in Markell 2003, 6)

It was thus not the objective of interviews to judgementally interrogate life-narratives with a view to exposing hypocrisy, rather through the extension of 'a distinctively thick kind of respect' (Markell 2003, 7) discuss the opportunities and obstacles to environmental decisionmaking that individuals face in their own lives. This approach was successful in exploring how the trade-offs involved in environmental decisionmaking affected individuals, and how they managed to negotiate its tensions.

(In)coherence and compromise: strategies of separation

> I think you now have over 100 people working here and you have a mixture of people who have come, with different principles as to how they should lead their lives. (TM)

As the above quotation outlines, a range of different individuals live and work at CAT. Interviews

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focused on a cross-section of these individuals, including those on paid and unpaid contracts, those who were new to the Centre, and those had spent over a decade working there. Individuals from a cross-section of departments were interviewed (including biology, engineering, education and retail), and 'local' staff – who were born and raised in the Machynlleth area – were interviewed along with 'incomers' who had moved to the Centre especially to live within an ecotopian setting. Despite the variety of jobs and backgrounds at the CAT, what these individuals shared was their choice to execute their professional skills in the service of the Centre. For many this choice represented a significant commitment to their personal (ecological) ideals. However, this decision was itself fraught with compromise: on one hand it proactively accelerated environmental solutions through advice, experimentation and education, yet on the other it compromised their ability to earn a lucrative salary elsewhere. As the following respondents outline, many could see the funny side of the compromise they had made by working at CAT on low- or no-wages, especially compared with the 'careerist' trajectories of mainstream society:

> I had worked in offices and I didn't know what I wanted to do and I ended up working at the MOD [Ministry of Defence], which is absolutely hilarious because they thought that I was coming to join a cult when I came here! That is interesting to see people's attitudes when you come to work in an environmental charity! I came here just over two years ago in May and thought that it was such a great place and so it was quite radical to become a volunteer at 31 and just give it all up. (RT)

> We have all made sacrifices to come here … Earning 13 grand for someone who is super qualified, super experienced earning 13 grand working on a nature reserve, you know?![6] (GY)

For these individuals their decision to trade their financial and career security for what they see as environmental security for themselves and the broader planet is a key aspect of their environmentalism. For some, this decision is so significant that it exhausts their sense of commitment to the environment. Allocating their professional life, their '9 to 5', to the Centre is such a large portion of their waking day (and, through accumulation, their week, year and life) that it fulfils what they see as their commitment to support a greener lifestyle. By making this employment decision they are 'doing their bit'. This means that when their working day is done these individuals feel they are free to adopt values and practices that do not necessarily cohere with any accepted environmental ideal. In short, their private life remains unfettered by the need for green. As the following respondents suggest:

> Many people who work here have nothing to do with CAT in their private lives, they just do their jobs and have no concept of the environmental impact that their home life has. (PI)

> For example, you have people here, who have just come here for a job, there are lots of cars here yet we all come from 5 or 10 miles of here … and we keep making spaces for cars (GT).

The use of a car for a short commute to work could, from an ecological perspective, be seen as unnecessary and harmful to the environment, thus the gradual expansion of the car park for staff use implies that the green philosophies of CAT are not wholly extended into the travel habits of many who work there. It is clear that, for some individuals, as soon as the work day is done (literally in this case) a less sustainable philosophy guides action. Thus some individuals have chosen to split their professional from their private lives, and only activate their green sensibility when they 'clock in' to work, as the following respondents suggest:

> A lot of jobs you aren't expected to be the role you're in when you not there, do you know what I mean? We're like a doctor or policeman in some ways, that when you walk out of CAT you are expected to stay on duty to a certain extent. And if you are flying off on holiday you will get raised eyebrows, which is good in some ways but you also think to what extent am I doing this as a mission and I am buying into the CAT thing as a job and to what extent should I be able to leave it behind? Sometimes I think, maybe it's the rebel in me, because I think well I can have a holiday, I can surely do that? (TD)

> We did joke about [extending environmental ideals into our personal life] but I said I am not stopping going on my holidays! (SH)

For these individuals, a separation is established between professional and personal commitments. Their professional identity is that of a CAT environmentalist; however their personal life is intentionally separated from this identity. Here, therefore, individuals cleave their identity, they practice what I have called elsewhere a 'spatial

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division of identity' (Anderson 2004). One aspect of their self is articulated in their professional space, and another aspect in their personal lives. In these cases the coherent, unified self has been decomposed then recombined into a new identity that is ordered yet contradictory.

In the examples outlined above, individuals have 'staged and cobbled together' a self that lacks consistency but not coherence. In practice, individuals impose a strategy of segregation, separating their personal and professional lives and the concomitant value systems that define each aspect of their identity. The tension between environmental and consumerist values has the effect of 'fragment[ing] people's lives between professional and private, each of these being dominated by different – if not, indeed, contradictory norms and values' (Gollain 2004, 17). Within 'mainstream' society, it may be considered normal for economic values of efficiency, productivity and competitiveness to characterise work priorities, and comfort, security and the ability to empathise (for example) to characterise personal lives. It may be expected that the alternative lifestyles evoked within the spaces of CAT would be more closely aligned with the values of home and humanity than in the mainstream, and as a consequence individuals may be more open to aligning their personal and professional selves. However, in the cases of the individuals outlined above, the process of individualisation has led them to dis-embed then re-embed a segregated identity, but with a crucial inversion: here the professional self is 'green', and the personal self is not. These individuals have adopted this strategy of segregation in order to negotiate the contradictions of their individuated tensions of environmental decisionmaking. Cleaving the self allows a distinct space where environmental ideals can take priority (their professional lives), as well as creating a separate space in which the values of industrial and capitalist society can have more influence (their private lives). This strategy is successful in defending their 'deviant' environmental ideals from potential ridicule, whilst also living out a professional existence that is rewarding and fulfilling on a personal level.

(In)coherence and compromise: strategies of alignment

However, the process of individualisation does not inevitably produce a 'portfolio' of intentionally split selves (after Handy 1989). Many individuals at CAT face up to the trade-offs involved in becoming green by seeking to align their personal and professional identities. These individuals feel strongly what Tuan has called the 'cultural pull of consistency', the idea that 'what is integral and whole is good and should stay that way' (2004, 35). The following respondents illustrate how some wish to integrate all aspects of their identity through the process of individualisation:

> there is no real connection between some people's private lives and their job, and for me it was like 'you are working in CAT and that is enough?!' and it wasn't enough for me. … I couldn't see how you could be that disconnected about it. (RN)

> I don't really see how you can work here and then not live, or at least not try to live what you preach. How you can separate your life so clinically? (ER)

> I don't separate my life and work because I realise that I am going to be at work most of my time, … you have got to work and I feel that you have to be enjoying your work and doing something that you enjoy and believe in, and I personally want to be doing that, so the two things sort of interconnect. I don't think that I am ever going to work for McDonalds or ICI because it just wouldn't be me. (WW)

This latter set of individuals does not engage with compromises involved in environmental decisionmaking by employing a strategy of segregation. Rather they have sought employment at CAT in part to unify or align their personal and professional identities. Through individualisation they have decided that eco-aspiration belongs in all aspects of their life, rather than just one fragment, and wish to reciprocally extend these practices from the personal *into* the professional, and back again.

Despite this wish for alignment, these individuals remained painfully aware of the trade-offs they face in 'becoming green'. Specific attention was focused on these trade-offs through the development of a 'carbon calculator' at the Centre: the 'Carbon Gym'. The 'Carbon Gym' was a computer software package designed to estimate an individual's annual carbon footprint, based on a range of lifestyle decisions (including housing, transport, waste and energy use). The Carbon Gym software was introduced in order to educate staff as to the environmental consequences of their lifestyle choices. The intention was to address a perceived information

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deficit on behalf of employees and volunteers at CAT, and provide information so these individuals could make informed decisions on subsequent behaviour. For those individuals who were open to a strategy of alignment, the Carbon Gym illustrated the negative implications of aspects of their lives they had either been ignorant of, or conveniently overlooked, but were nevertheless willing to confront. Due to the carbon-bias of the calculator, for many the polluting effects of air travel concentrated the mind, as the following respondents outline:

> What you see in the Carbon Gym makes you appreciate how harmful carbon from flights is. The impact has really made me realise that flights are what you *can't* do. (AR)

> I suppose I have actively made some decisions based on the facts that it is not good for me, or society or the planet. The obvious one is going on flights on *Easy Jet* as a lot of my friends do. They say that they are going to Spain for the weekend or whatever and because they are so cheap I could do that as well. But because [of the Carbon Gym] I have got it into my head that it's not such a good thing so that is something that I have decided that I don't want to do. (GU)

> I was rather pleased with myself when I came [to work] here but because of the Carbon Gym I realised I was doing some of the things but not all of it was good. I hadn't thought about eco electricity and so it was, 'Right! Something else I can do!' So I've greenified that! A lot of eco friendly stuff is cheaper and more efficient, so I am thrilled to bits with that. (DW)

As these individuals were open to a strategy of alignment, they were prepared to realise the benefits, and absorb the costs, of changing their personal lives in line with ecological ideals. Through knowing the harm that certain activities cause to the environment they were prepared to 'rearrange their wanting' (after Wilding 2003). This process was less a matter of depriving themselves of 'goods' but, due to the re-formation of their sense of identity, more a question of 'self respect' (see Wilding 2003; also Fox 1995; Naess 1989). For the one-off, high (environmental) cost activities like flying, or the simple switch to eco-electricity, these individuals found the trade-off to be a straightforward decision. However, for other individuals, the Carbon Gym served to complicate and intensify the tensions involved in becoming green. Again, due to the carbon-bias of the calculator, the issue of flying became a key issue:

> Q: So flying, what do you think of that?
>
> A: A bloody nightmare, that's what I think of that. My Carbon Gym was pretty horrendous because I went to South and Central America last year and I took a couple of internal flights as well: *very* guilty. What I discovered was that I cycled to work about 5 miles each way every day and I had just come back from Spain and my flights probably gave the same amount of carbon emissions as if I had driven to work the last two or three years instead of cycled. I thought 'oh this is a nightmare! I have just cancelled out three years of cycling and it just seems such a waste, you know?' But having realised that I should be a bit more careful about my flying, the way my life was just made it really, really difficult, because I couldn't take long holidays in a stretch and I had a really busy, hectic way of life. I suppose I could have found a way if I'd tried but it just doesn't really work that way when you are really, really stressed all the time and you can only take a week at a time on holiday. You tend to just go out and buy yourself some flights there and then, or even just go away for the weekend by plane, because you just need something simple to organise and just go, just to un-stress yourself. (AG)

The introduction of the Carbon Gym therefore opened up a 'moral conversation' (Hobson 2001) for individuals about their lifestyle decisions. Each faced the personal choice of defining particular activities in their life: which activities and commodities were 'wants' (and therefore open to compromise or surrender), and which were 'needs' (i.e. what they couldn't do without, regardless of environmental cost). Whereas 'wants' could be aligned within their sense of environmental identity, 'needs' (especially 'needs' with a high ecological cost like flying) required individuals to contradict their green ideals and break their re-formed identity. Due to personal contexts in which individuals made these decisions, 'wants' and 'needs' were defined differently by all. PH, for example, decided he could use his car for essential trips, ('I always feel very guilty every time I use my car but it still doesn't stop me from using it') whilst others decided to dispense with car use altogether ('I haven't got a driving licence. Every single meeting I go to I use public transport … the rail links are quite good if you can be motivated' (AP). Other individuals explain their decisions in terms of the broader social and familial context in which they live their lives, as the following respondents suggest:

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> Like Jim's son's mum lives in ____ so of course she wants to see him every other weekend so we drive to _____ services which is about 75 miles, and she drives down and we drive up, which is 300 miles a week every other weekend, and there is no way we could do that besides driving, and that is a dilemma, but there is no other way we can do it, and why should they [the family] suffer for our convictions? (SW)

> [Discussing the use of towel nappies/diapers for babies] When we were living in ____ we tried all the nappy laundry services, but I just couldn't persuade P to take them on, and certainly in the first 6 months and she was the one on maternity leave, but I couldn't persuade her to take it on. (DF)

> [Discussing the same issue] I firmly believe that if I was in control of the child care I would have used reusable nappies but he [my husband] didn't. So is it okay for one member of the household to push the other who is knee deep in washing up and nappies to suggest, and perhaps patronise, that they might think about the environment more? We came to a sort of compromise by using environmental degradable nappies, which aren't degradable at all. And I suppose this was our way of getting rid of the guilt. (DH)

The moral conversation reignited by the engagement with the Carbon Gym thus left all respondents facing up to the tensions involved in environmental decisionmaking. Where some found it possible to trade-off single activities (such as a short break flight), many found it more difficult to align regular activities such as commuting, nappy use, shopping (etc.) with a pure environmental ideal.

As many of the above quotations have outlined, the cost of compromising environmental ideals was not simply registered in terms of carbon emissions or environmental destruction. Their failure to align their practices was also measured emotionally through a sense of guilt. Despite their experience, but in line with conventional environmentalism, these individuals retained the notion that it ought to be possible to live a sustainable life in contemporary society. Their failure to do so was a personal failure, one which left them frustrated, and at times disempowered. As one respondent concludes,

> Sometimes I think hammering on about all the environmental reasons is a turn off and seems all negative, it really is. It is all you can't do this and you can't do that and everything you do has a negative impact and so you come to the conclusion that well actually we are better off without them. It is not enough for a satisfying life as part of the picture you need some reason to be alive. It is important to remember that you can't sell an idea if the whole underlying message is that you have got to feel guilty about things, it is not going to work. (RE)

Thus, in the face of this reality, some individuals had come to the conclusion that it was impossible to successfully negotiate the trade-offs involved and achieve a wholly sustainable life in contemporary society. As a consequence, these individuals had attempted to adopt a more pragmatic approach to becoming green.

A politics of pragmatism: 'the odd cream cake'

> I do actually think that there is no actual point in us trying to preserve human life on this planet if we don't enjoy it. It's about quality of life and that sort of thing, but I kind of think there is a place for little treats – but not flying if we can possibly avoid it. It is not an excuse for damaging the planet but it is the feeling that I think that the planet can afford for us to have the odd cream cake. (IH)

> Q: So the possibility of becoming completely green is not really obtainable in your experience?

> A: You might actually starve to death in this country if you try to be, if you tried the ultimate 'good life'. You might be very true to your principles but you would be very thin in the winter. You would have your work cut out. (DG)

> Q: So do you think it's a realisable goal being a 'green' person?

> A: Well nothing in life is perfect, there is always compromise. (SF)

Through personal experience of engaging with the tensions of environmental decisionmaking, many at CAT had come to the conclusion that it was impossible to achieve a wholly sustainable life in contemporary society. This recognition led many to manage this situation through adopting a 'politics of pragmatism'. This strategy involved a practical environmentalism that, in the words of Chatterton, 'works towards the bigger picture through intermediate and pragmatic steps which involve compromises' (2006, 265). These pragmatic and intermediate steps involved a range of everyday

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actions from encouraging the use of energy efficient light bulbs, to compromises involving using the car for work:

> Everyone says its only one little light bulb but my aims have evolved into trying to make the whole world a greener island rather than making this island [the world of CAT, and my own life] a dark green island. As information officer my job is about helping people become greener and *everything* is important to this end. (DG)

> I allow the use of the car. I am not aiming to go quite extreme as some people expect. I think that there is some perception in the wider world that you are either green or you are not. But if everyone makes 25% reductions then that is a bigger step forward than managing by the policies being put in place at the moment. (SJ)

> What you have to think about is not to be negative and listen to the negative opinions of some of people who may say, 'oh you flew here or you flew there and you are really bad'. You just have to get the balance. (RL)

These individuals therefore chose not to adopt either a strategy of segregation or a strategy of alignment for their re-formed identity, but rather adopt a pragmatic strategy of 'incremental integration'. Individuals chose to cope with the inevitability of compromise when becoming green by acknowledging there would always be activities they had little immediate power to change (due to structures of state decisionmaking, familial obligation or cultural pressure, for example), but by also committing to consistently adopting those changes that were possible. This strategy of incremental integration of environmental ideals into everyday life was recognised as far from 'perfect', but enabled a life to be led that was positioned on a green trajectory, and was free from the guilt or paralysis about what was possible for any individual to achieve. As the following respondents outline:

> I have been a bit more pragmatic I guess, more in the way of changing things and telling people what they *can* do rather than say, 'Go and live in a little hut on a small holding and do your own things and disconnect yourself from society' sort of thing. So working from the inside and trying to affect as many people as you can who come here from Birmingham on a day out. (MI)

> I would certainly describe myself on the greener side of things, but I wouldn't claim myself to be terribly green on that half of the pitch … I think you can make quite a big impact without doing an awful lot. Changing your bank account means your money is not being invested in certain areas that you might be unhappy about. You can do things like making your home more energy efficient, just trying to get into good habits rather than thinking 'I can't put up solar panels which is a big investment so I can't make huge changes …'. (TR)

> So often it's the little things that make a difference like not leaving your TV on standby and things like that which are a big energy saving. The little red light is left on for about 20 hours a day. (DB)

Thus a politics of pragmatism has been enacted by some at CAT in order to negotiate the tensions involved in becoming green. This politics positions individuals on a trajectory that aims for an environmentally benign life, knowing that this is a constantly moving target, and one that is probably unobtainable in any absolute sense. This politics of pragmatism has a number of effects. Firstly, it requires individuals to regularly reflect on their lifestyle choices and their changing material and social contexts. This reflexivity informs new actions (or inactions) in order to reposition individuals (back) on a green(er) trajectory. This reflexivity and perpetual re-balancing means emphasis is placed on action and future change, rather than on a sense of guilt that may threaten to destabilise the self and dis-empower environmental action. Finally, this politics of pragmatism changes what 'becoming green' means. This pragmatic approach transforms the radical edge of environmentalism (and ecotopia) into something more recognisable as eco-modernisation (Mol and Sonnenfeld 2000). Due to the tensions created by the saturation of consumerism into modern culture the vast majority of individuals seek some benefits of the capitalist system, despite the negative implications they may induce. From this perspective, the practical edge of environmentalism has thus been transformed; it is no longer about being an escape from consumer society, or forging a revolution in the mainstream, but turning the TV off at the wall. As one long-term employee of CAT states, this politics is evident at the Centre, with a clear progression identifiable, 'from fervent religious extremism to everyday pragmatism, and that is natural I guess'. From this perspective, therefore, environmentalism as a radical project is dead (see Shellenberger and Nordhaus 2005). Nevertheless, the politics of environmental pragmatism does offer hope for a greener future. Adopting a strategy of incremental integration of environmental ideals into everyday

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life could realise a sustainable future through commitment and compromise. To put it in the lexicon of consumerist society, it is not possible for everyone to 'get rich quick', and similarly, it is highly unlikely to 'get green quick' even for those at CAT: there are no short cuts to an environmental future. The roadmap to sustainability involves a long journey, and many steps. The following respondents at CAT use a similar analogy:

> You are never doing the best you can. … There is always what should I do and how do I do it? Everyone has that tension, for some it's about cars and you'll always want the better one or the bigger one or faster one. Everyone lives by this, but for me that same tension drives me towards reducing my carbon footprint. (RA)

> I don't think that it is useful when you look at the enormous reduction in carbon emissions that is required that those figures are possible to sell to the general public. You need to present in terms of the compound interest that you get from banking. If you compound up between now and 2050 the actual annual percentage reduction you would need on a personal basis, it is not very many percent. Take off 5% a year and you are nearly there. That would be far easier message to sell. If you get everyone into doing the 5% a year it would be in the mind set and reductions wouldn't be necessary every year. (MO)

By adopting a strategy of incremental integration, individuals at CAT have found it possible to reframe environmental problems into positive actions that they can do to change their lives, in short they have transformed their tensions into something they can practically and emotionally manage on the way to becoming green.

Conclusion

This paper has explored how individuals manage the trade-offs involved in environmental decisionmaking. Focusing on the Centre for Alternative Technology, it has investigated how individuals negotiate the 'greening' of lifestyles on one hand and the ideologies of consumption on the other. This paper has illustrated how citizens at CAT have adopted 'strategies of separation' – where professional practices are cleaved from the personal to establish balance, if not consistency, in everyday life; and 'strategies of alignment' – where (unsuccessful) attempts are made to unify personal and professional practices in line with environmental ideals. It is not the purpose of this paper to judge the appropriateness of either strategy; what is clear, however, is that strategies of separation suffer from a lack of communication and engagement between the disconnected aspects of individuals' identities, whilst strategies of alignment suffer from the (misguided) assumption that absolute green ideals can be achieved within contemporary society and thus often leads to feelings of disappointment and guilt.

However, some individuals at CAT have successfully negotiated the many trade-offs involved in environmental decisionmaking by enacting a 'politics of pragmatism' in their everyday lives. By adopting a 'strategy of incremental integration' they have moved away from the guilt and disempowerment of strategies of segregation, and engaged in an open and critical dialogue between competing aspects of their identity as both citizen and consumer. In short, they have shifted the tensions involved in becoming green into a practical trajectory for living, and thus offer a different route map for environmentalism in contemporary society.

This strategy of incremental integration attempts to encourage individuals, whether they be in 'ecotopias' such as the Centre for Alternative Technology, or in more mainstream spaces, to embark on a green trajectory through instigating small changes (e.g. turning the TV off standby, recycling, composting, and switching to green electricity). These 'low-hanging fruit' of environmental action may (or may not) significantly change the ecological footprints of individuals (depending on their overall ecological impact), but the broader intent is to generate a culture of engagement that sees environmental action not as 'pious and hair-shirted' (following Bedford *et al.* 2004), but as normal and practicable. Crucially, these small changes are not intended to be the beginning of the end for environmental action, but simply the end of the beginning. These small changes are part of a broader, genuine commitment to an environmentally benign trajectory that becomes more realistic the more it is imagined and lived. Thus it is recognised by those at CAT that, in and of themselves, these small cultural shifts will not be enough to enact a sustainable future. There are limits to individual action, and these limits will remain unless tackled directly by elected stakeholders and corporate shareholders. As the following respondents conclude:

> There are the dead obvious choices like whether to go by train to Paris or to fly to Paris, and then there are various factors which are much harder to change, a

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> kind of structural problem in the way we are set up as a society. (JT)

> I think it will be the government who changes the world or who doesn't. If you look at what the environmental movement has done since the 1960s in terms of persuading people they have tried everything. They have tried 'there is going to be an apocalypse, so you need your own energy and water'. We have tried guilt like 'you're an awful person if you don't so this', we have tried 'being green is fun', and we have tried 'being green is going to make you more money' and all of these things haven't persuaded people to take action. I think the long and short of it is, people will stop flying when it is too expensive or when someone tells them they can't, that is what will stop people. What will stop people throwing away things that can be recycled is when they have to and when it is the law and when you get fined for doing these things. We have tried everything else. (EA)

Thus the limits to individual action as a solution to the environmental problem are acknowledged by many within CAT. The strategy of incremental integration will only overcome these limits when it establishes a broader culture that includes governments and stakeholders in its commitment to an environmental trajectory. The broader adoption of this politics of pragmatism thus becomes a key challenge for 'environmentalism where we are' (Anderson 2010b) in the second decade of the 21st century.

Notes

1 All respondents have been anonymised.
2 As argued elsewhere, the Centre for Alternative Technology can be read as this latter type of citizen eco-action (see Anderson 2007 2010a).
3 There has been a long history of such consumer 'activism', from the first consumer 'boycott' in 1878, through to the rise of 'alternative consumption' in the 1980s (see Gabriel and Lang 2005; Johnston 2008; Micheletti 2003).
4 As CAT's *Crazy idealists?* publication states: '"Alternative Technology" was conceived as the body of genuine alternatives that would really work; it accepted the broad "alternative" critique … of "counterculture", conservation and environmental groups, the "organic" movement, cooperatives, spiritual and personal growth movements, women's liberation, de-schooling, the peace movement … but, crucially, did not throw out the methods of science and technology, the skills that went with them, and the fundamental insight that *you have to do the sums and get the numbers right*' (1995, 4, emphasis in original).
5 CAT's geographical peripherality refers to its location in rural mid Wales, 2–3 hours drive from motorway routes and city conurbations.
6 At the time of writing the UK average annual income was approximately £22 000.

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